

FIG. 1A

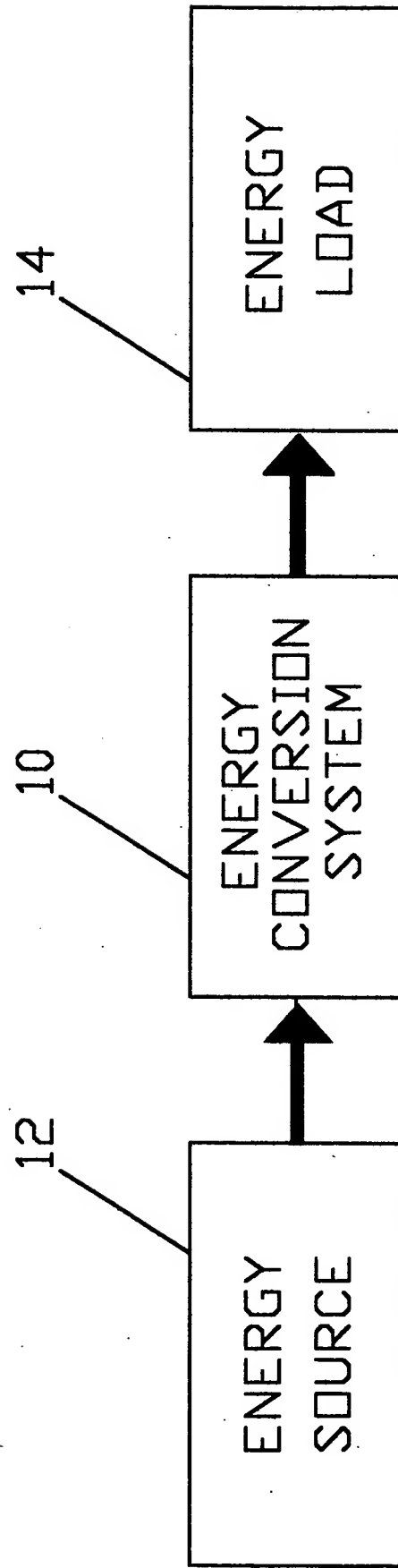


FIG. 1B

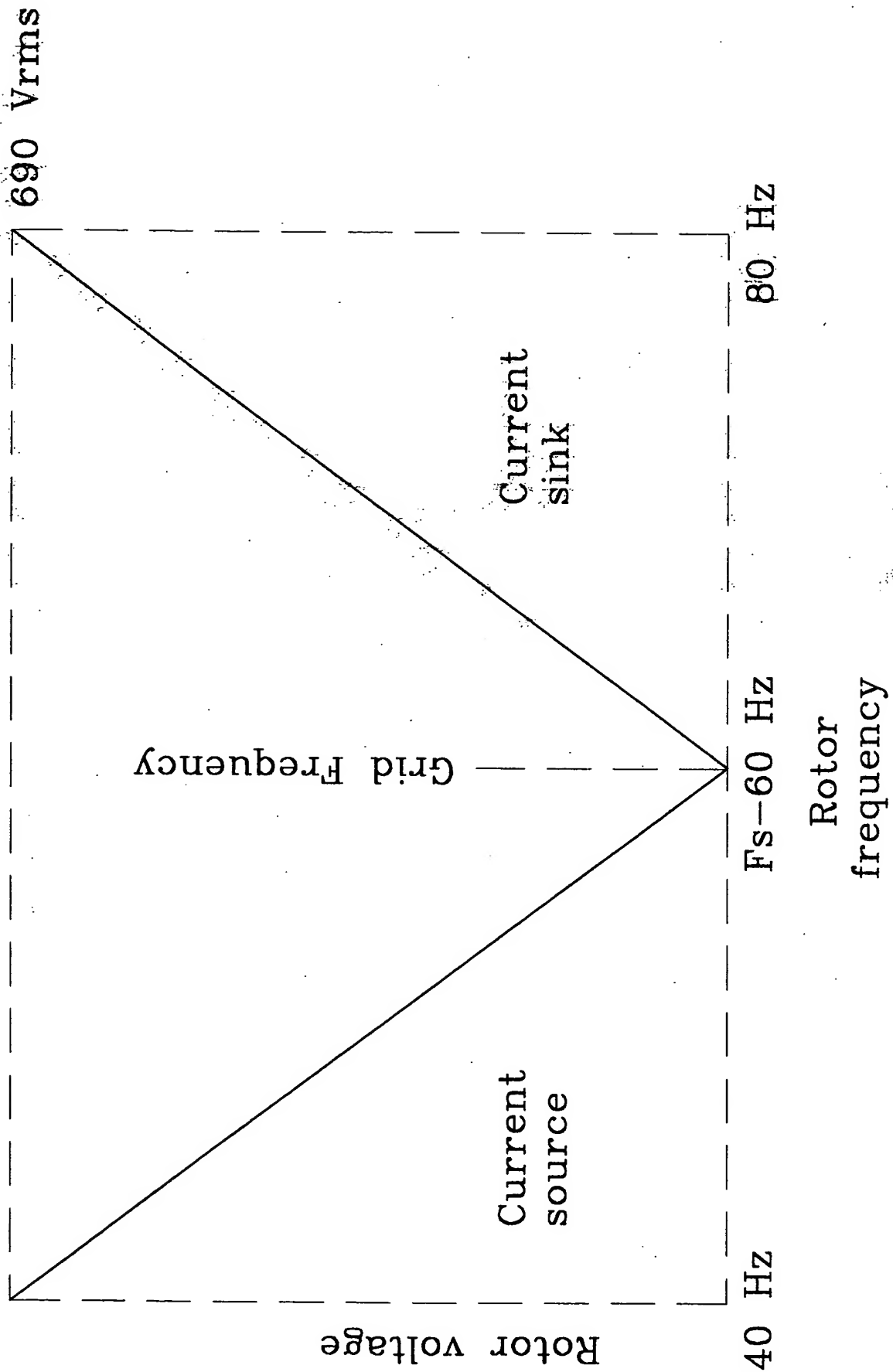


FIG. 2A

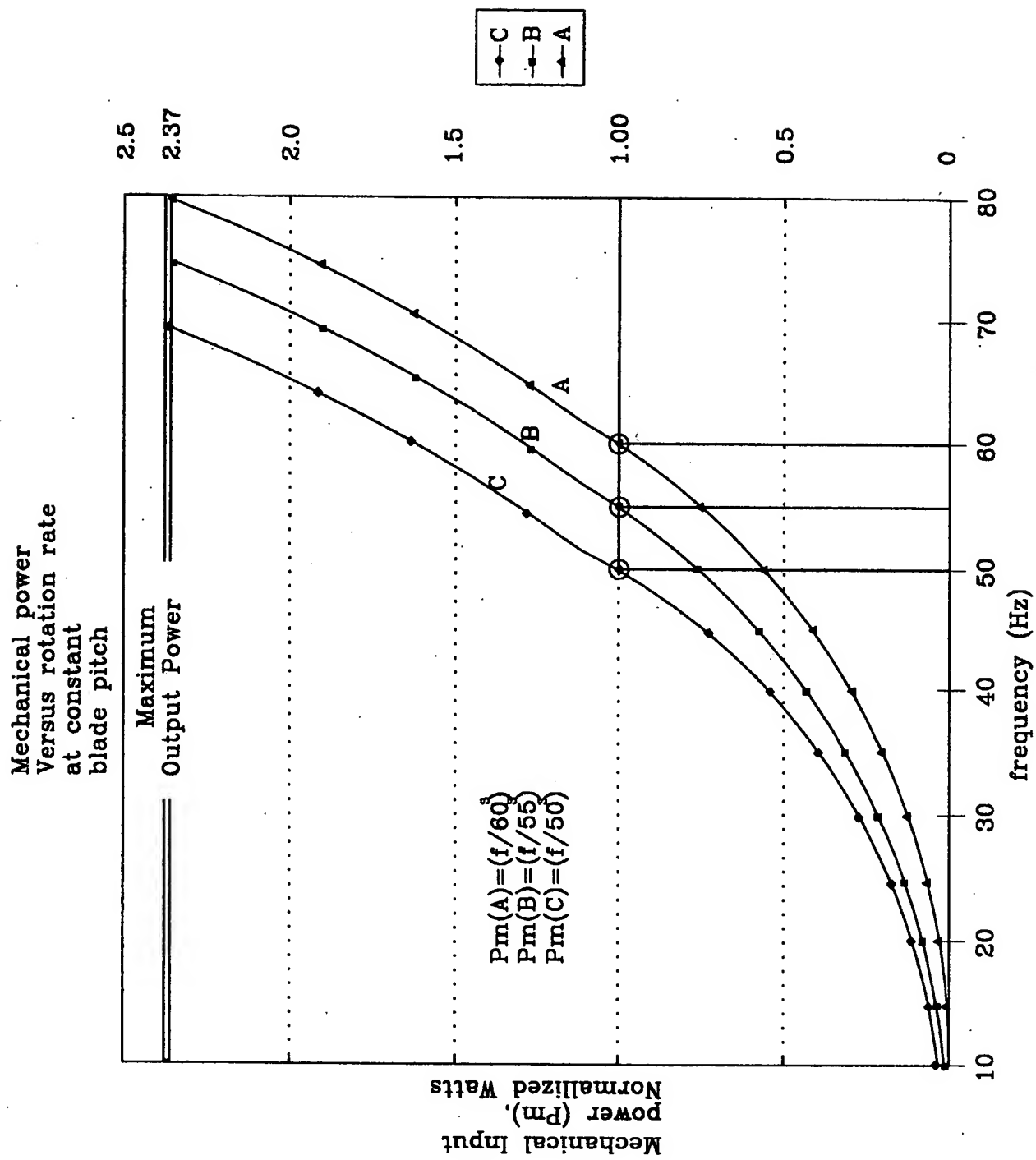


FIG. 2B

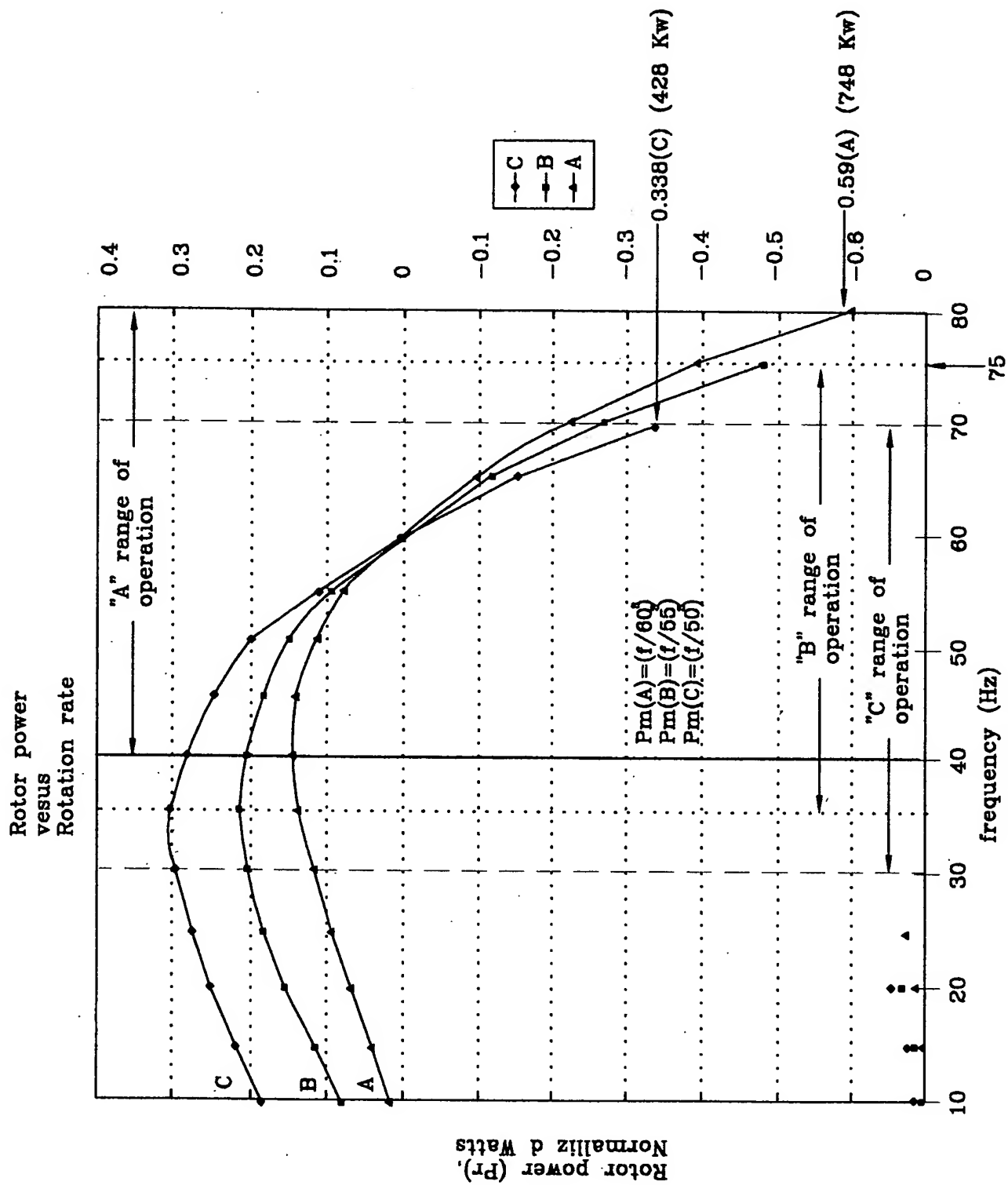


FIG. 2C

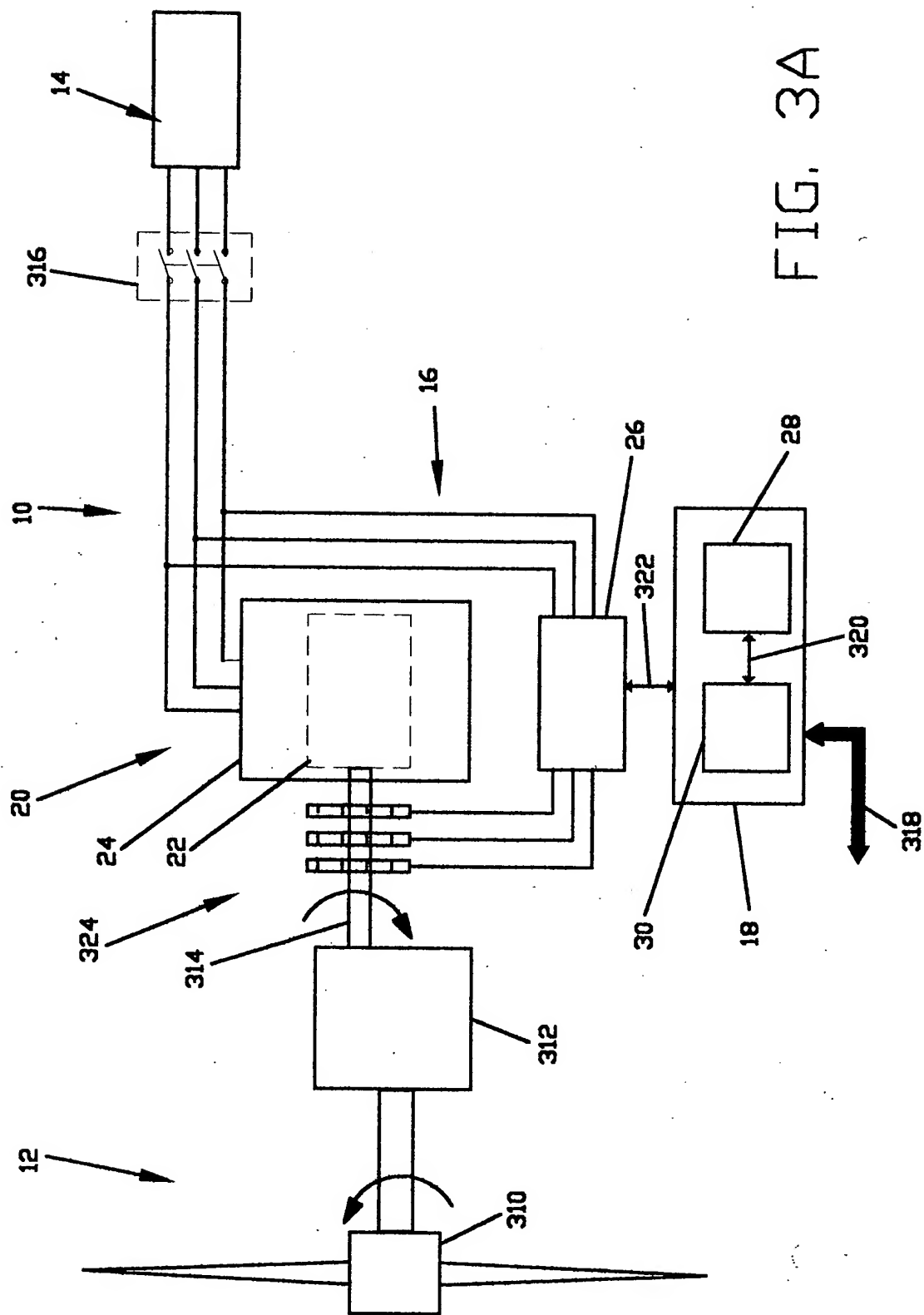


FIG. 3A

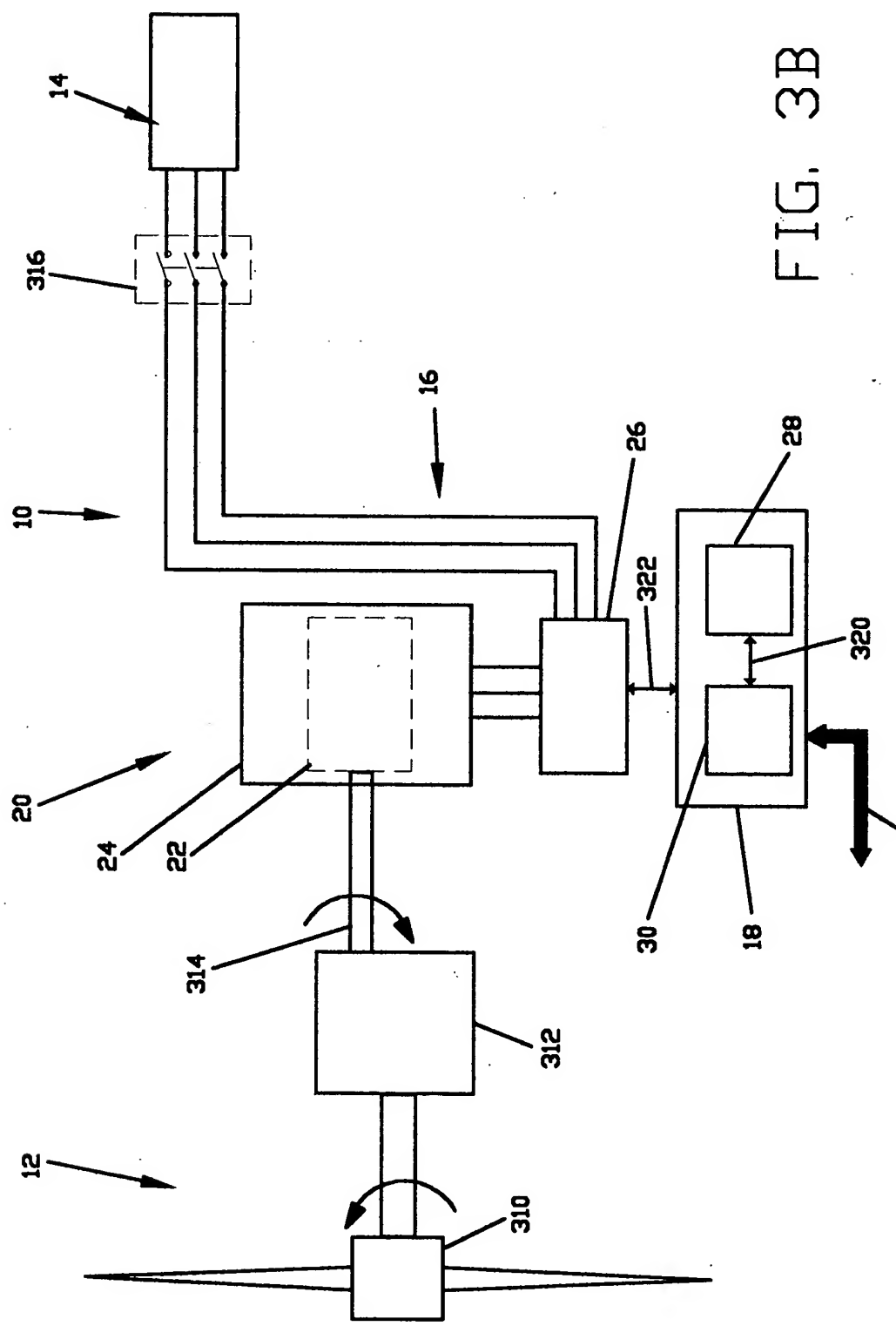


FIG. 3B

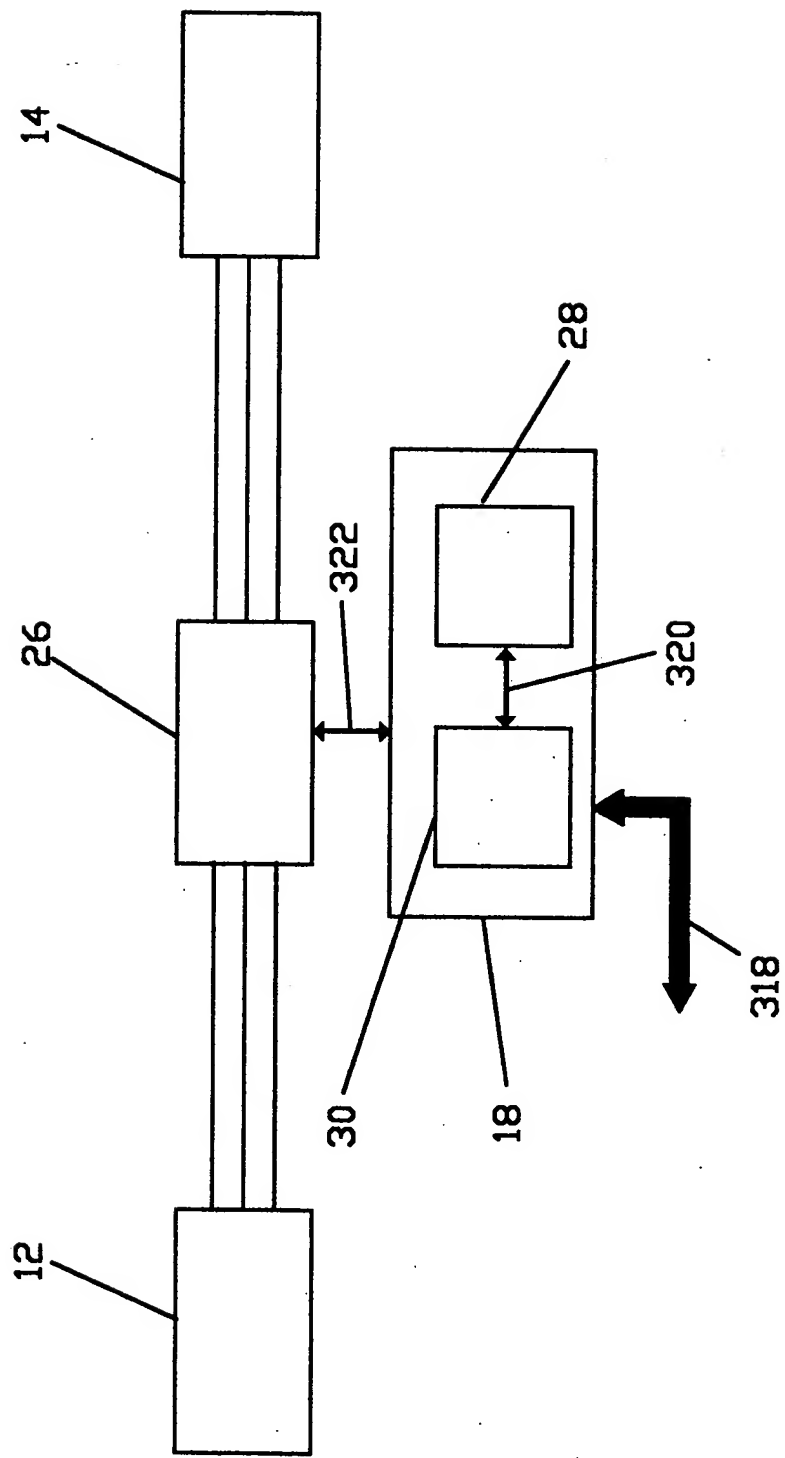


FIG. 3C

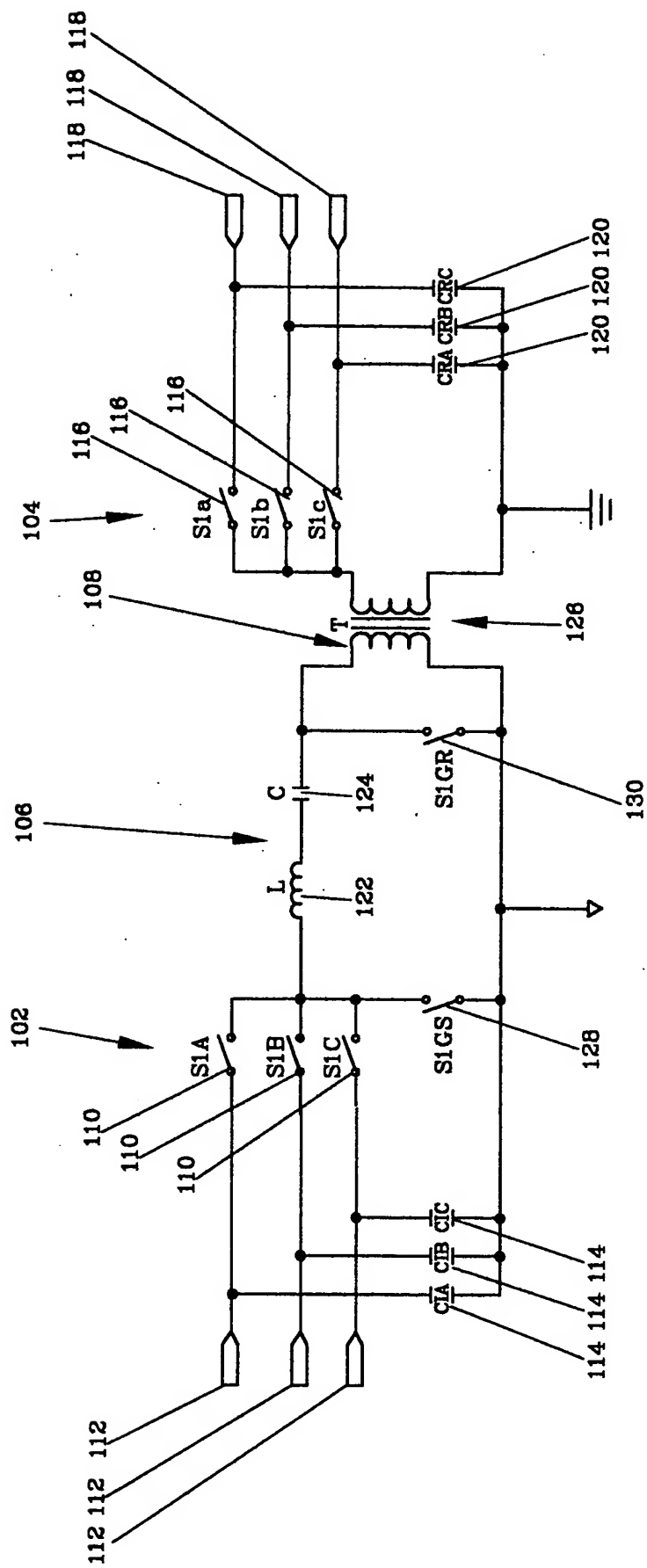


FIG. 4

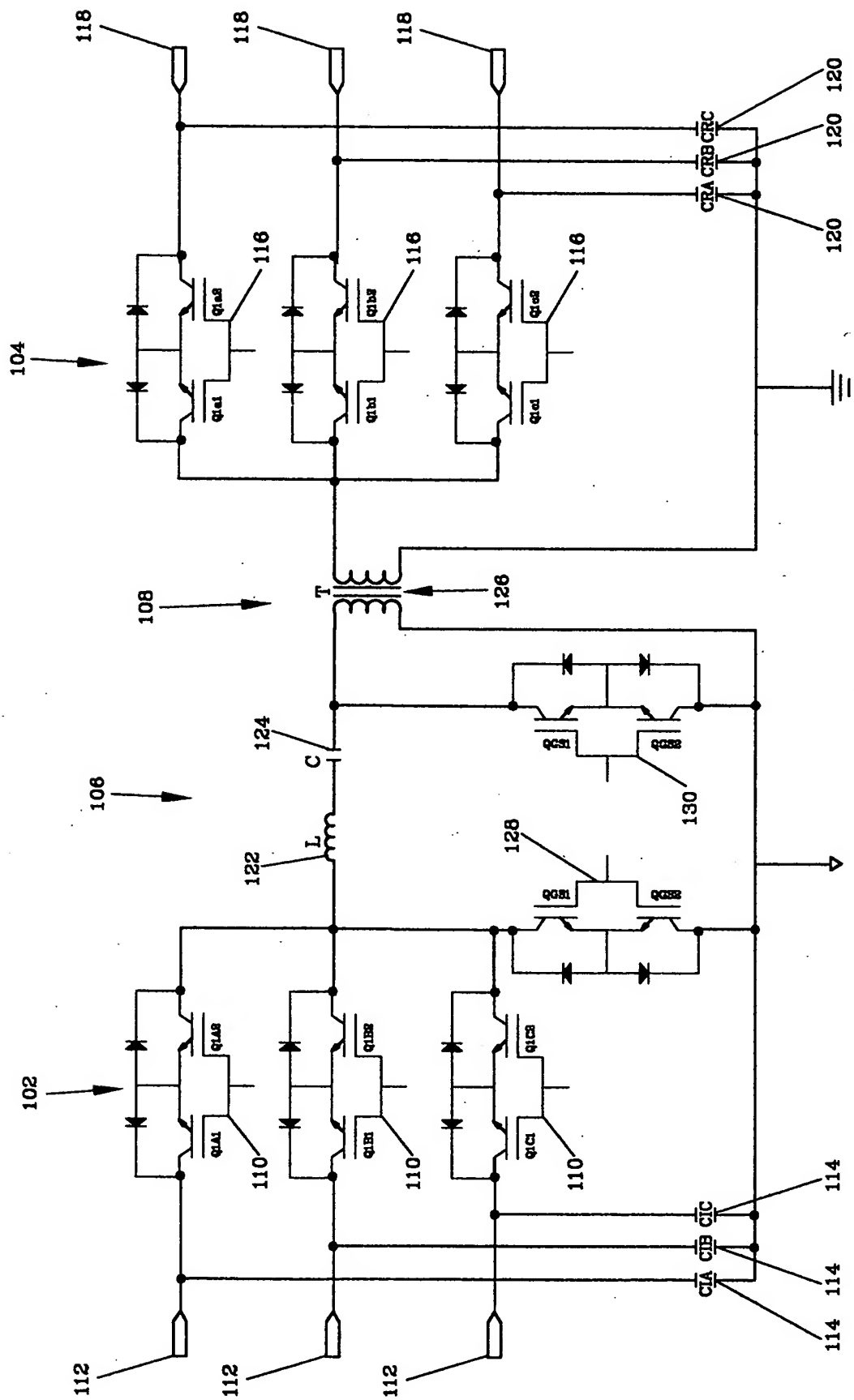


FIG. 5

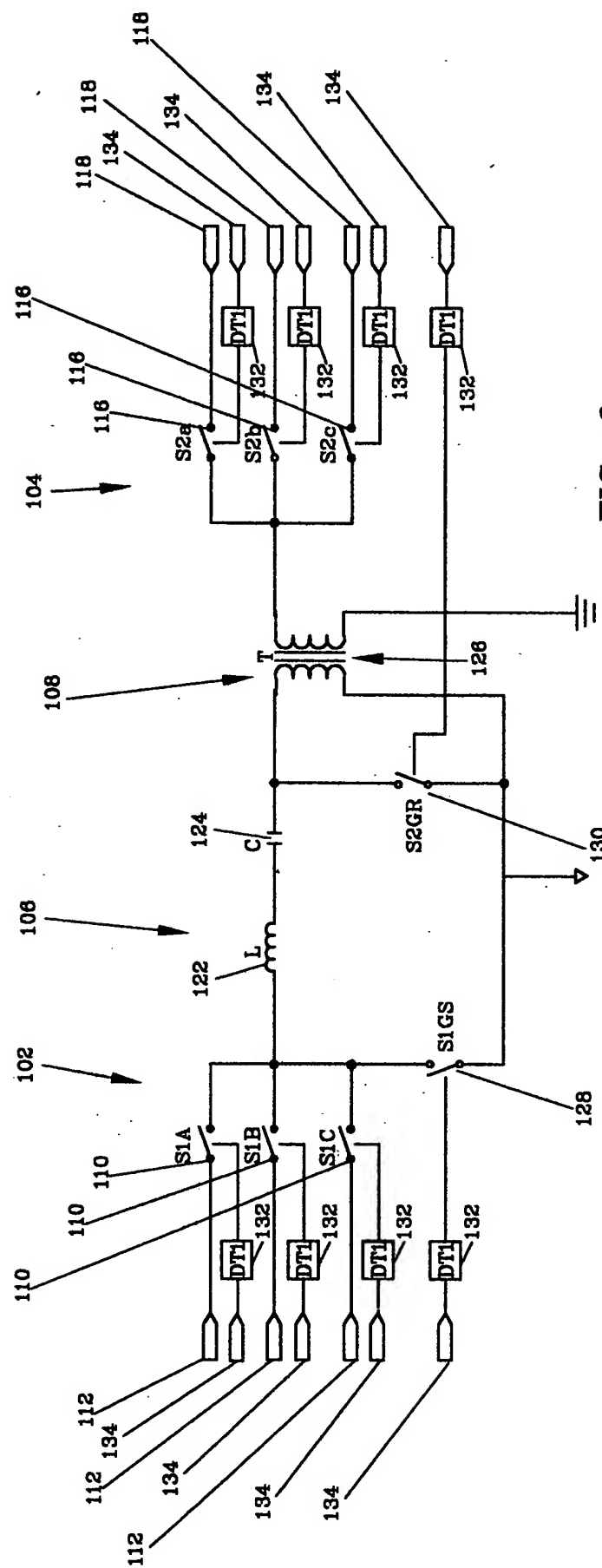
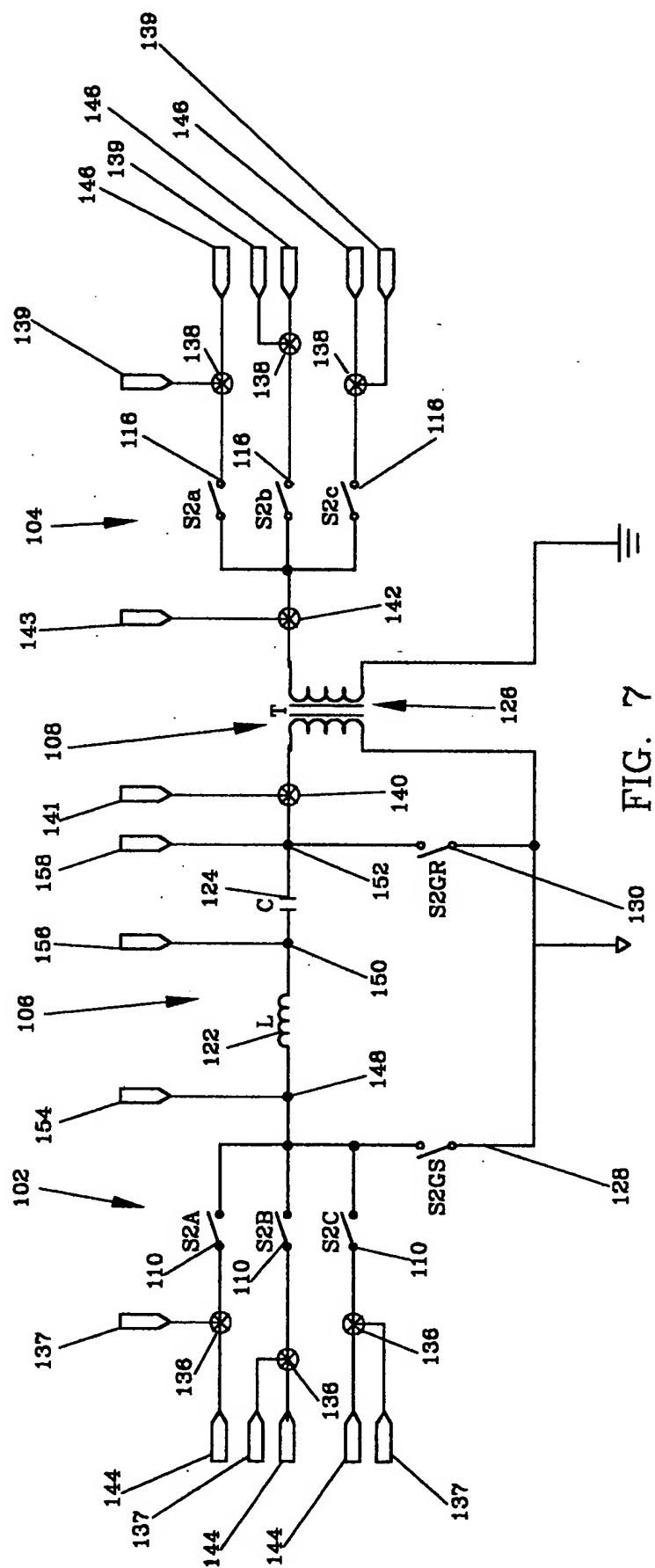
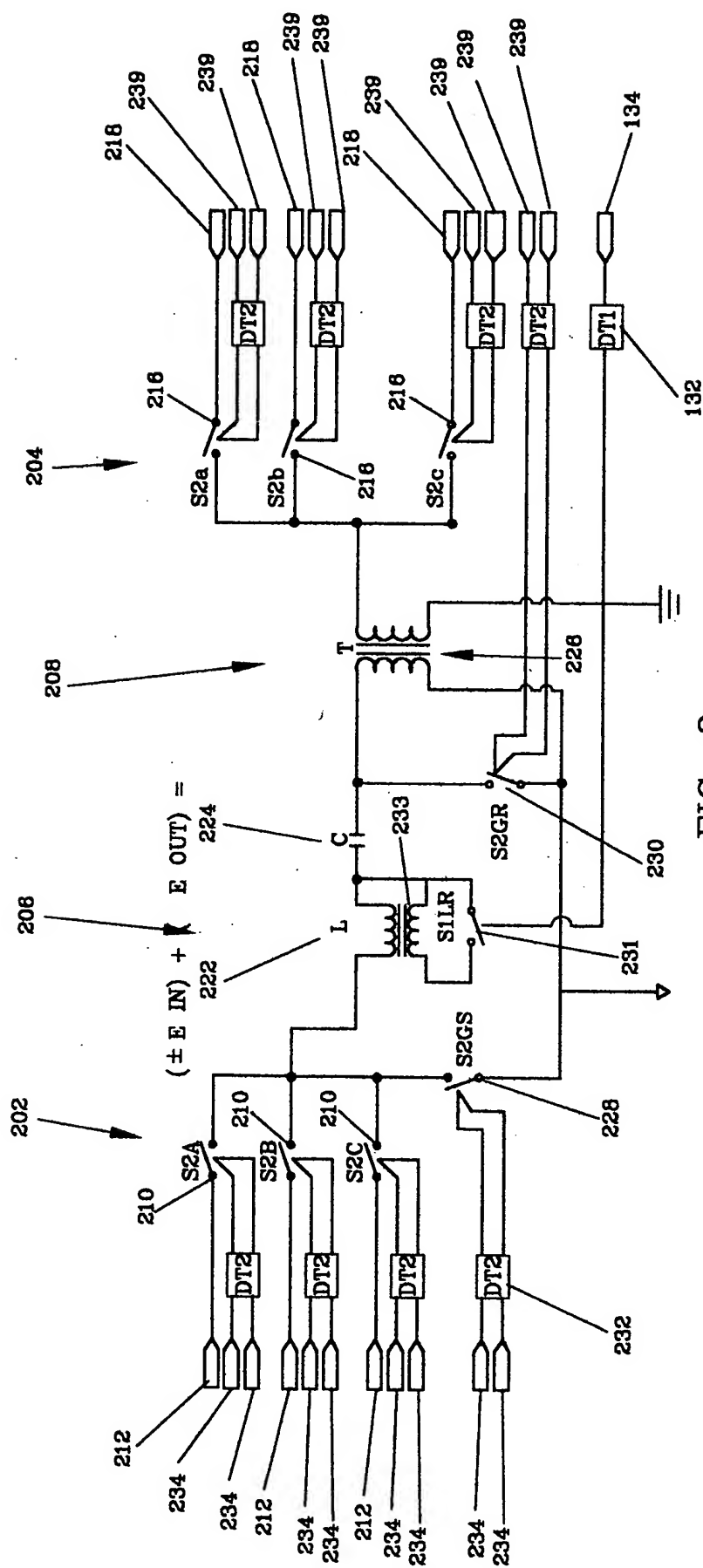


FIG. 6





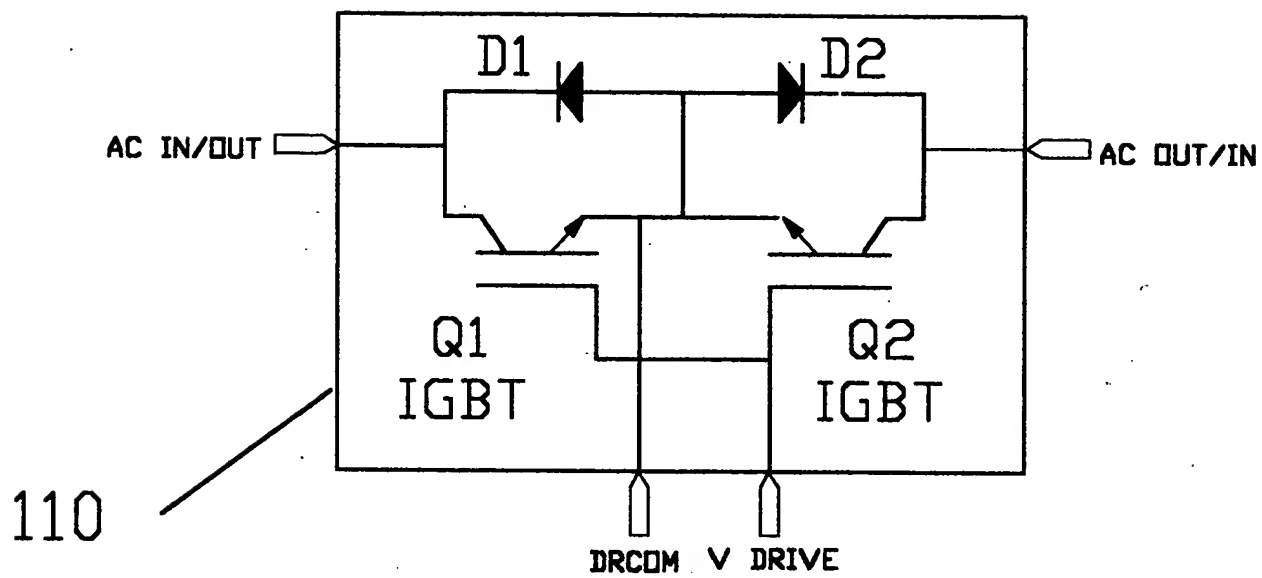


FIG. 9

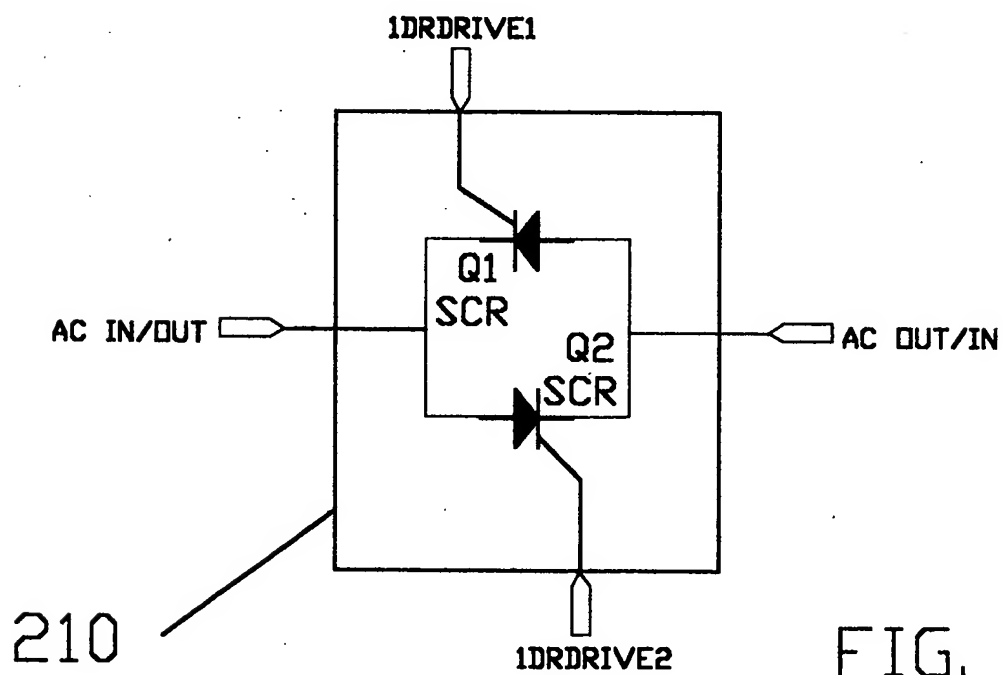


FIG. 10

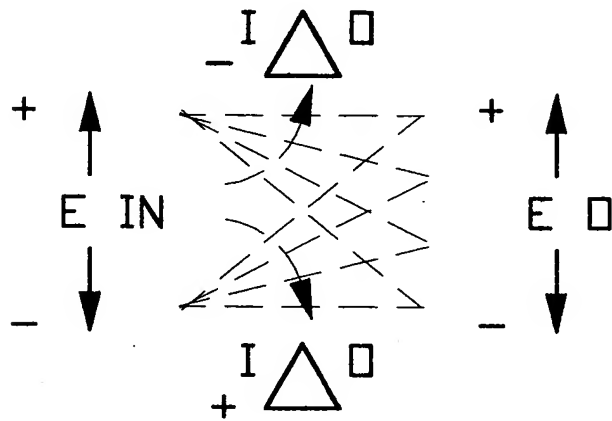
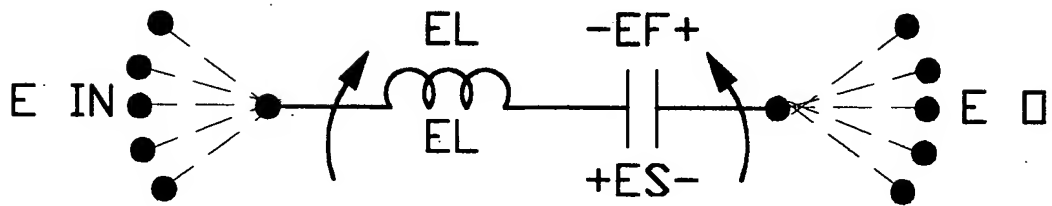
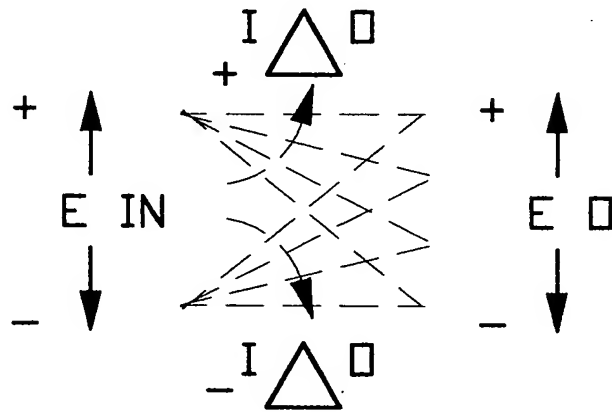
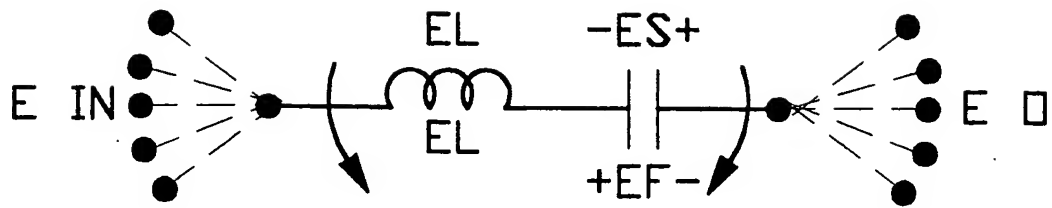
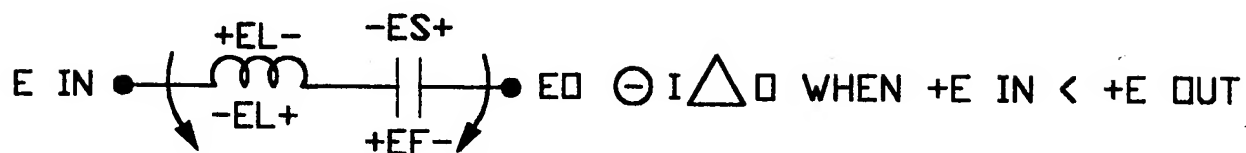


FIG. 11

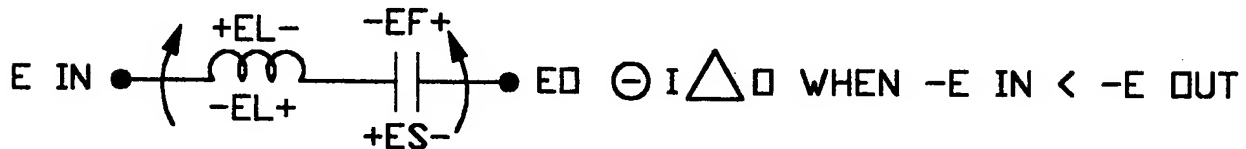
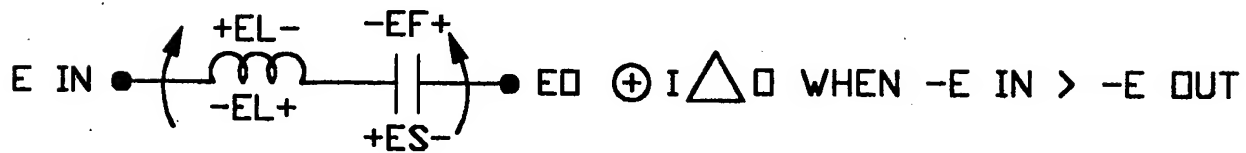
CHARGE TRANSFER $\square \equiv \Rightarrow >$



$$\langle \pm E \text{ IN} \rangle - \langle \pm E \text{ OUT} \rangle = \pm I \Delta \square$$

$$EL = ES \quad \pm I \Delta \square$$

$< \Leftarrow \equiv \square$ CHARGE TRANSFER



$$\langle \pm E \text{ IN} \rangle + \langle \pm E \text{ OUT} \rangle = \pm I \Delta \square$$

$$EL = ES \quad \pm I \Delta \square$$

FIG. 12

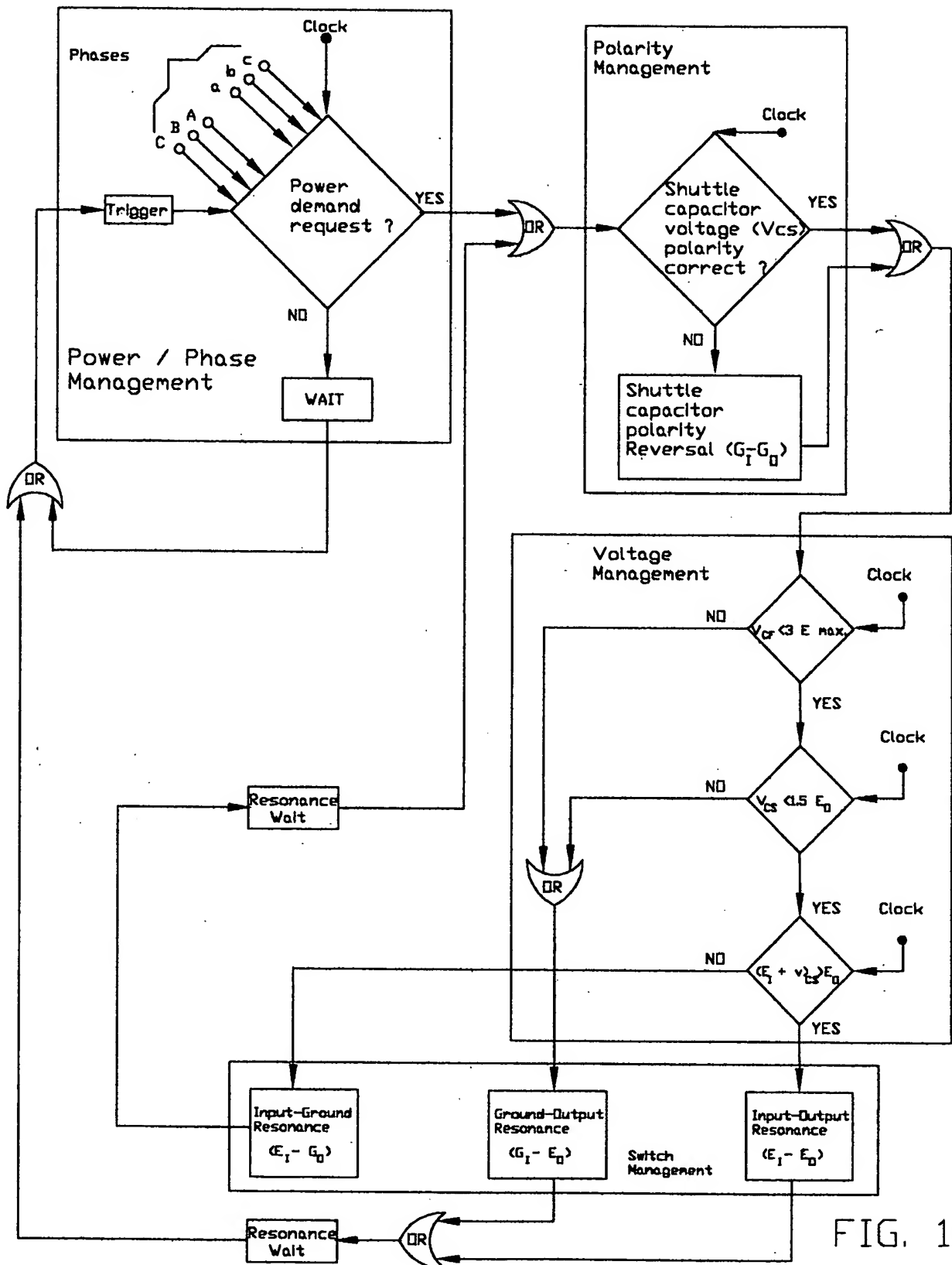


FIG. 13

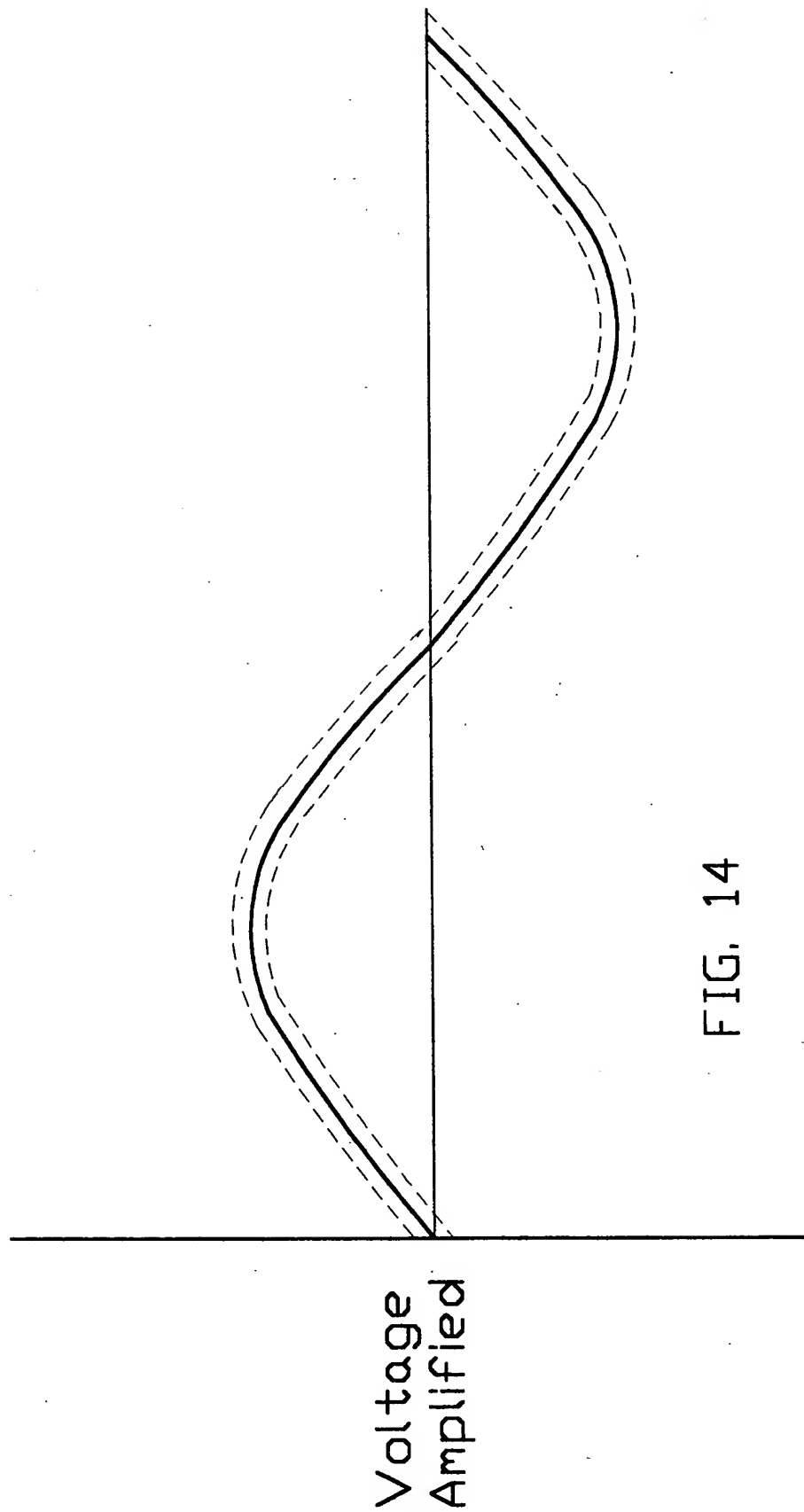
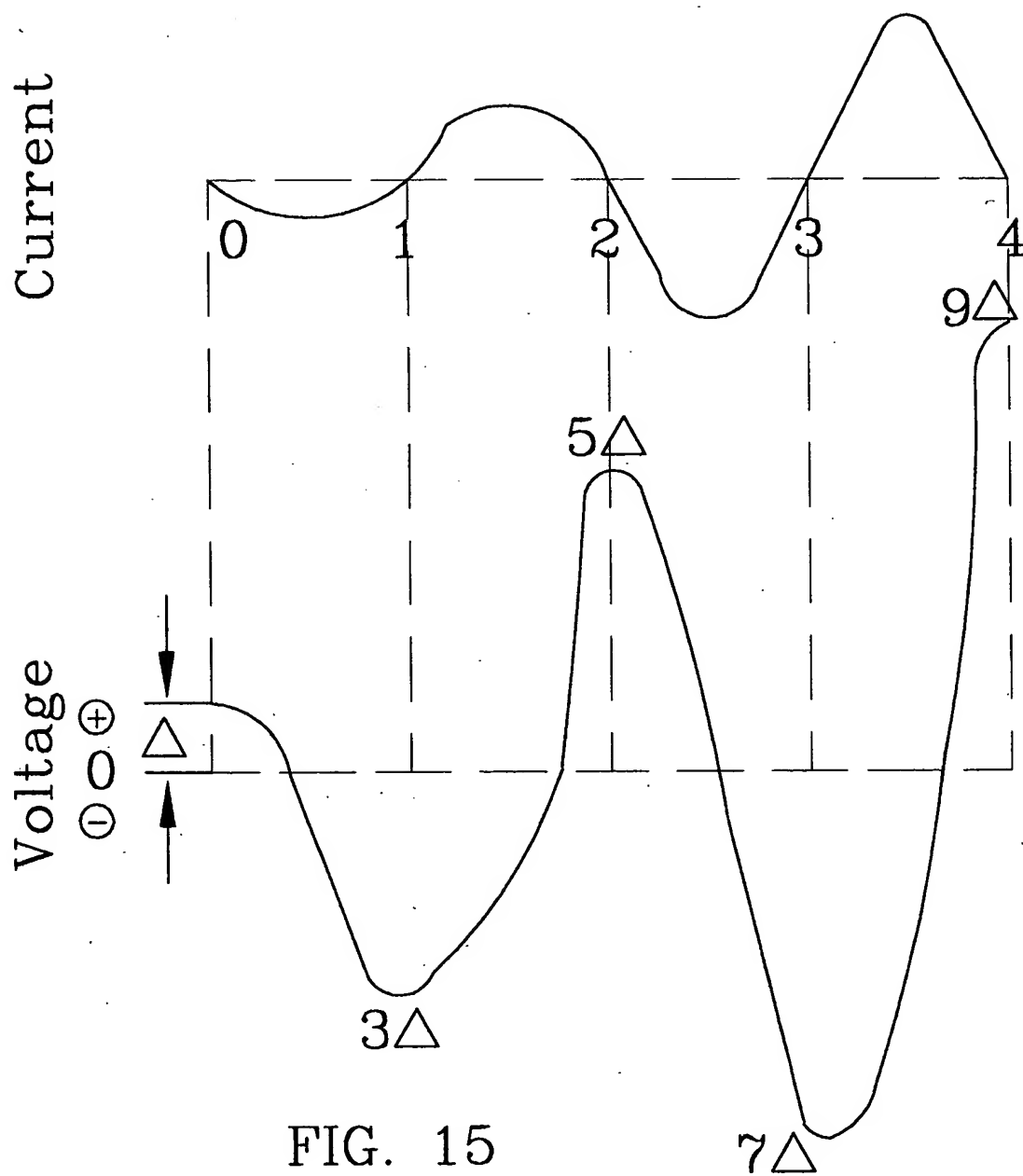


FIG. 14



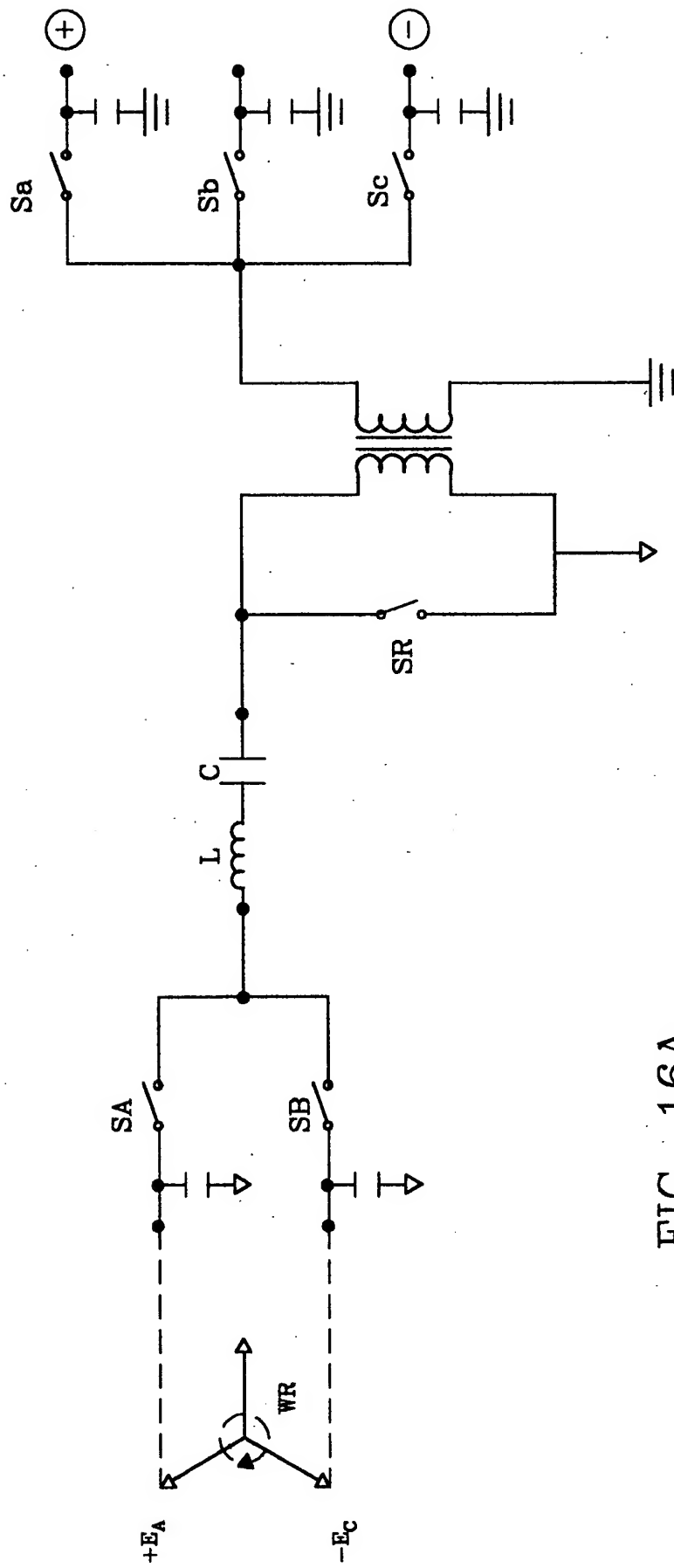


FIG. 16A

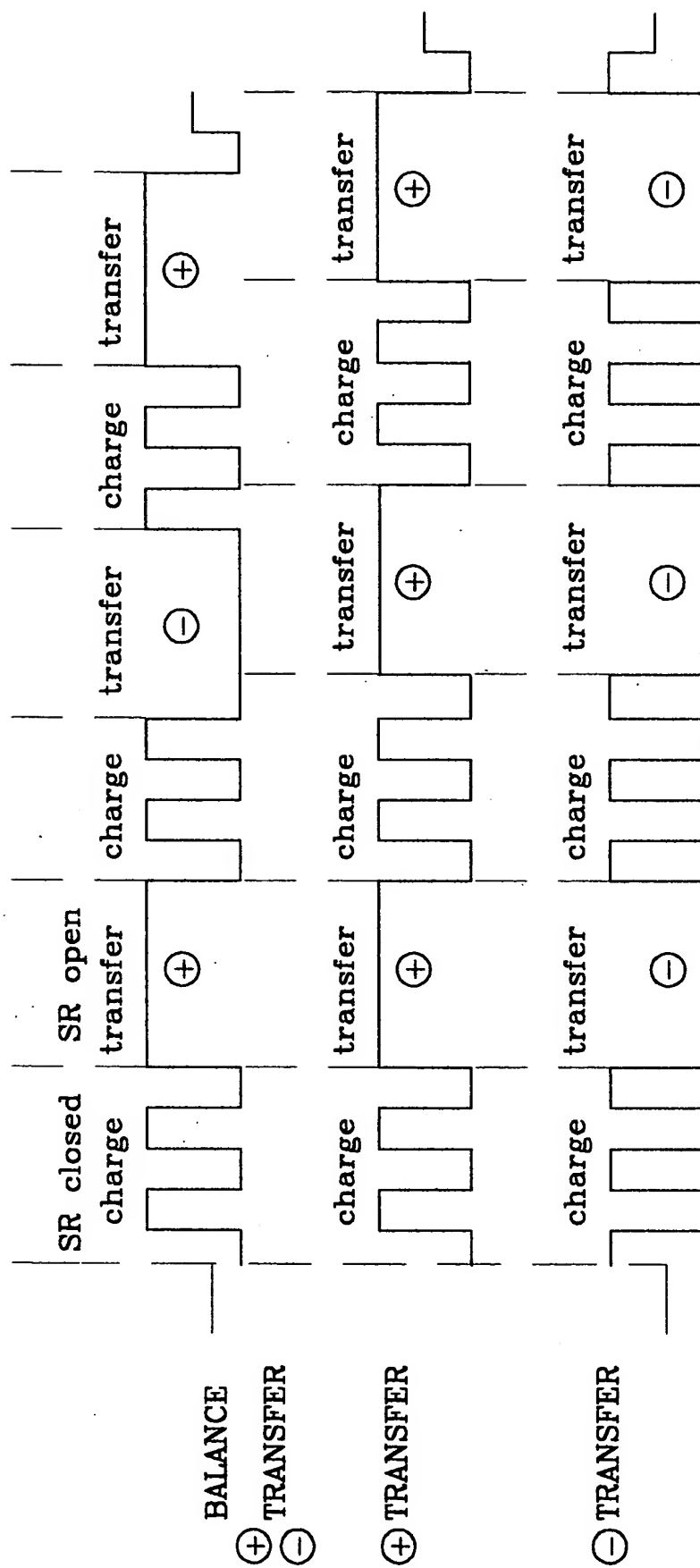


FIG. 16B

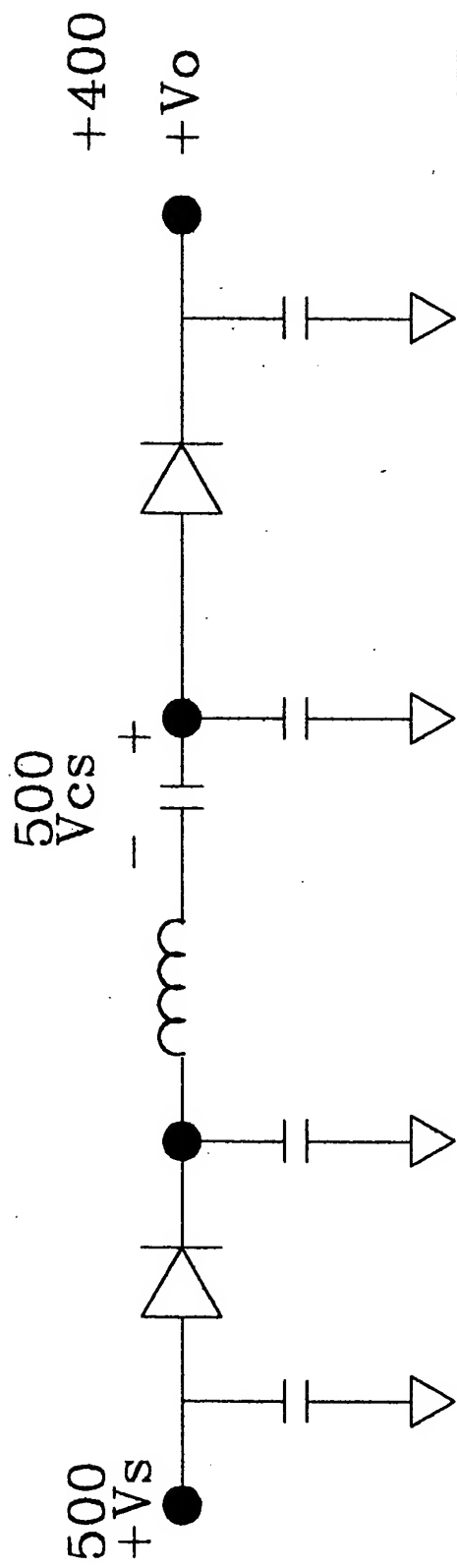


FIG. 17A

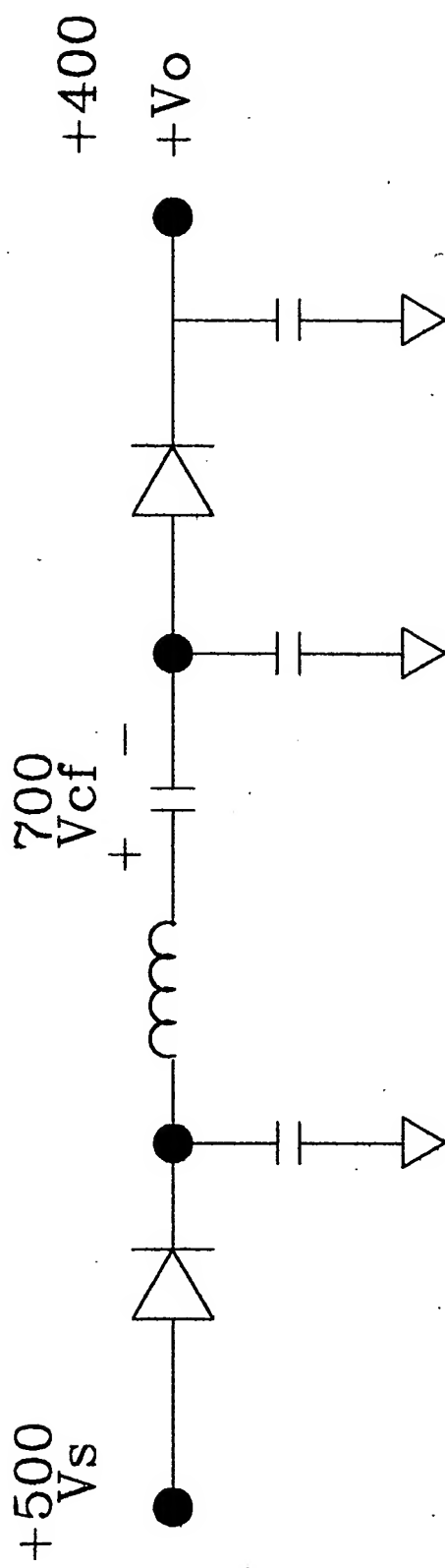
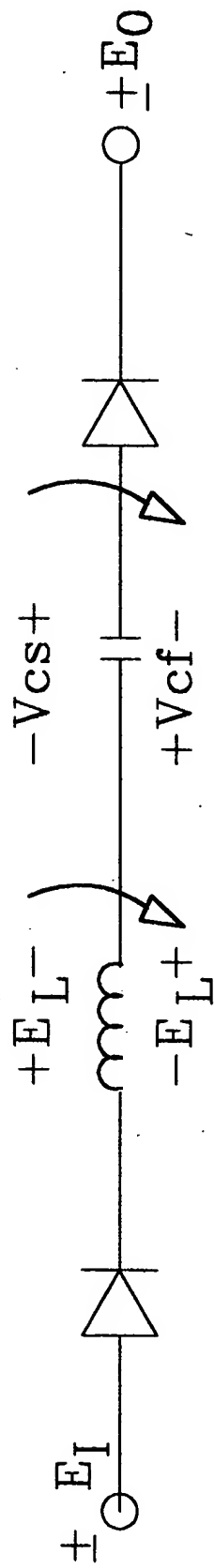
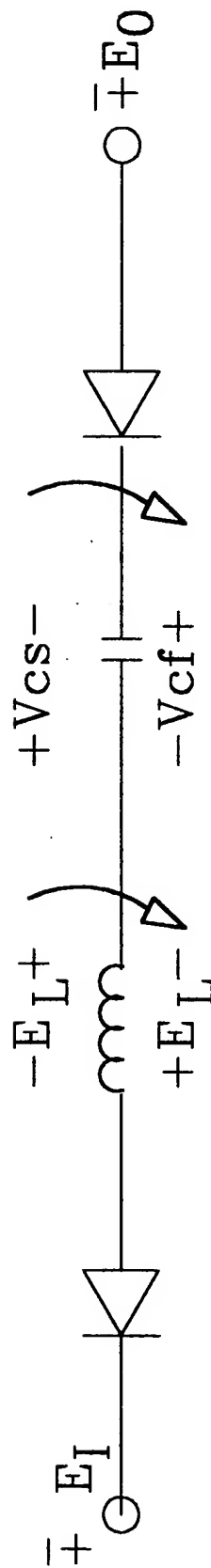


FIG. 17B



1A $(\pm E_I) - (\pm E_O) = \pm I \Delta O$

FIG. 18



1B $-(\mp E_I) + (\mp E_O) = \pm I \Delta O$

FIG. 19

$$2A,2B \quad |E_L| = |V_{CS}| + (\pm_I \Delta_O)$$

$$3A,3B \quad |\Delta V_C| = 2 \quad |E_L|$$

Therefore

$$4A,4B \quad |\Delta V_C| = 2 \{ \quad |V_{CS}| \quad \pm_I \Delta_O \}$$

$$5A,5B \quad \Delta q = C \quad |\Delta V_C| \quad = 2C \quad |E_L|$$

$$6A,6B \quad I_{av} = \Delta q \quad (PRF)$$

FIG. 20

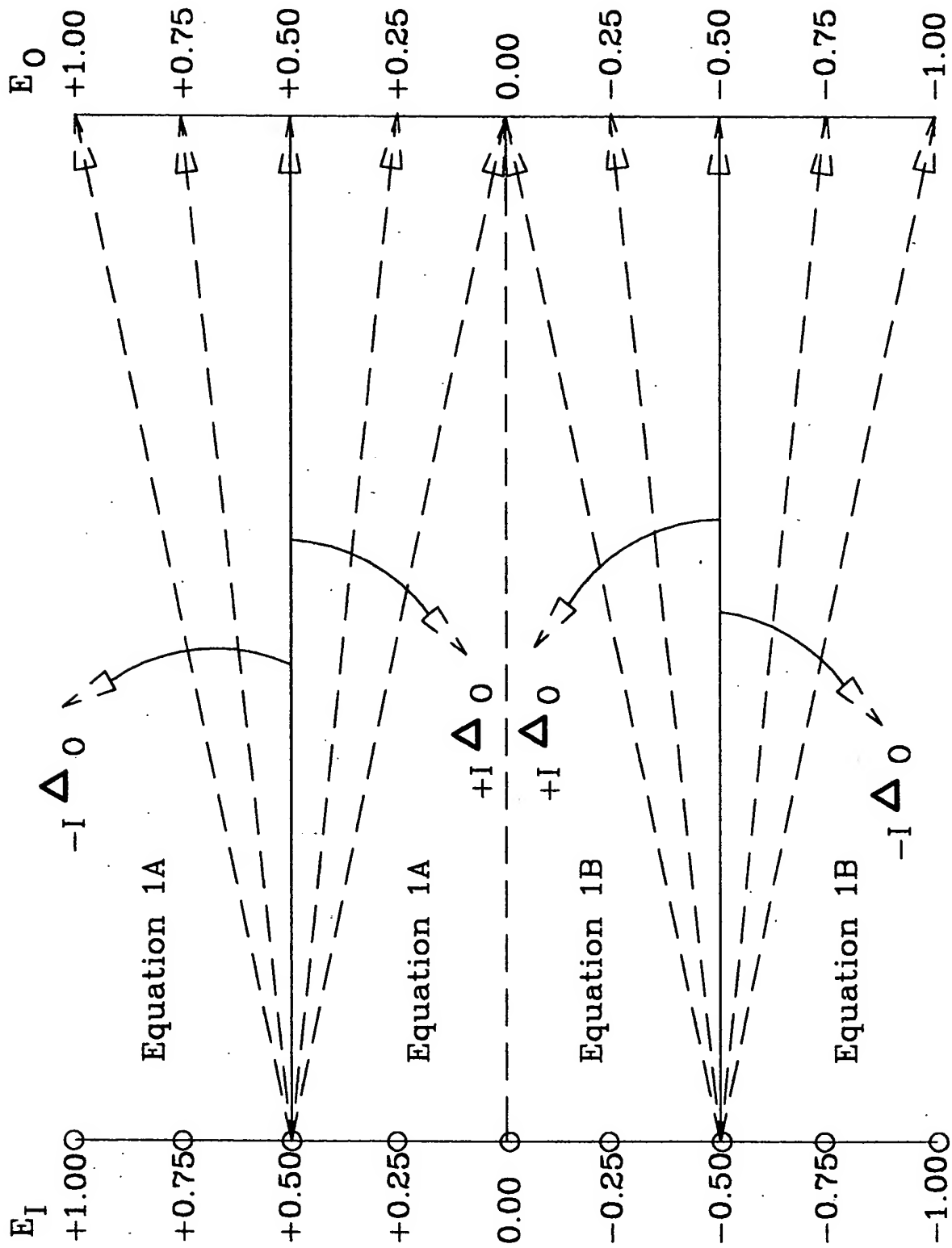


FIG. 21

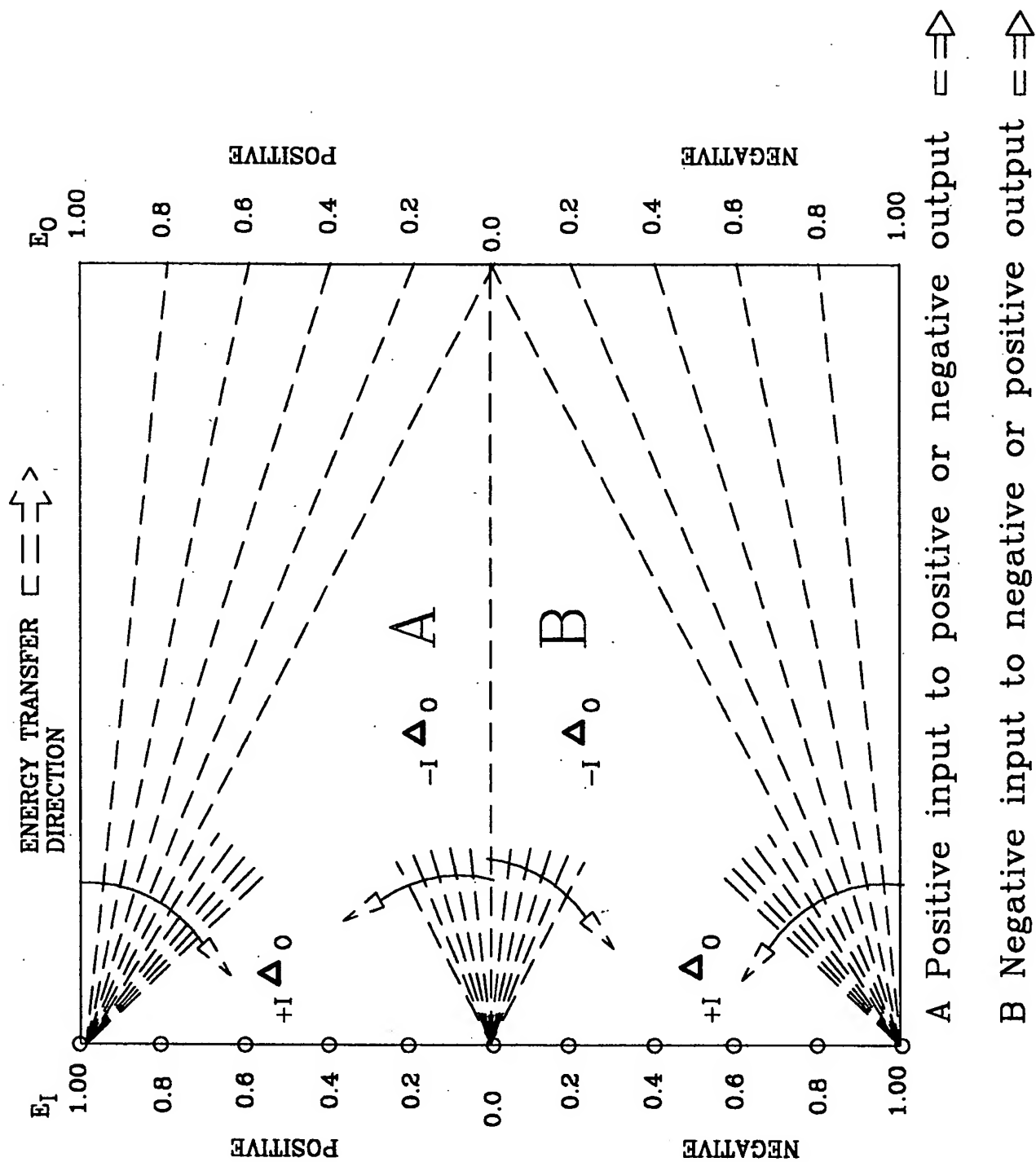


FIG. 22